

**SECRET**

**NO FOREIGN DISSEMINATION**



# **AN APPRAISAL OF THE BOMBING OF NORTH VIETNAM**

**(THROUGH 11 AUGUST 1966)**

**AUGUST 1966**

**S-3690/AP-2F**

Prepared Jointly by  
**The Central Intelligence Agency  
and  
The Defense Intelligence Agency**



**CONTROLLED DISSEMINATION**

**DIA Declassification/Release Instructions on File**

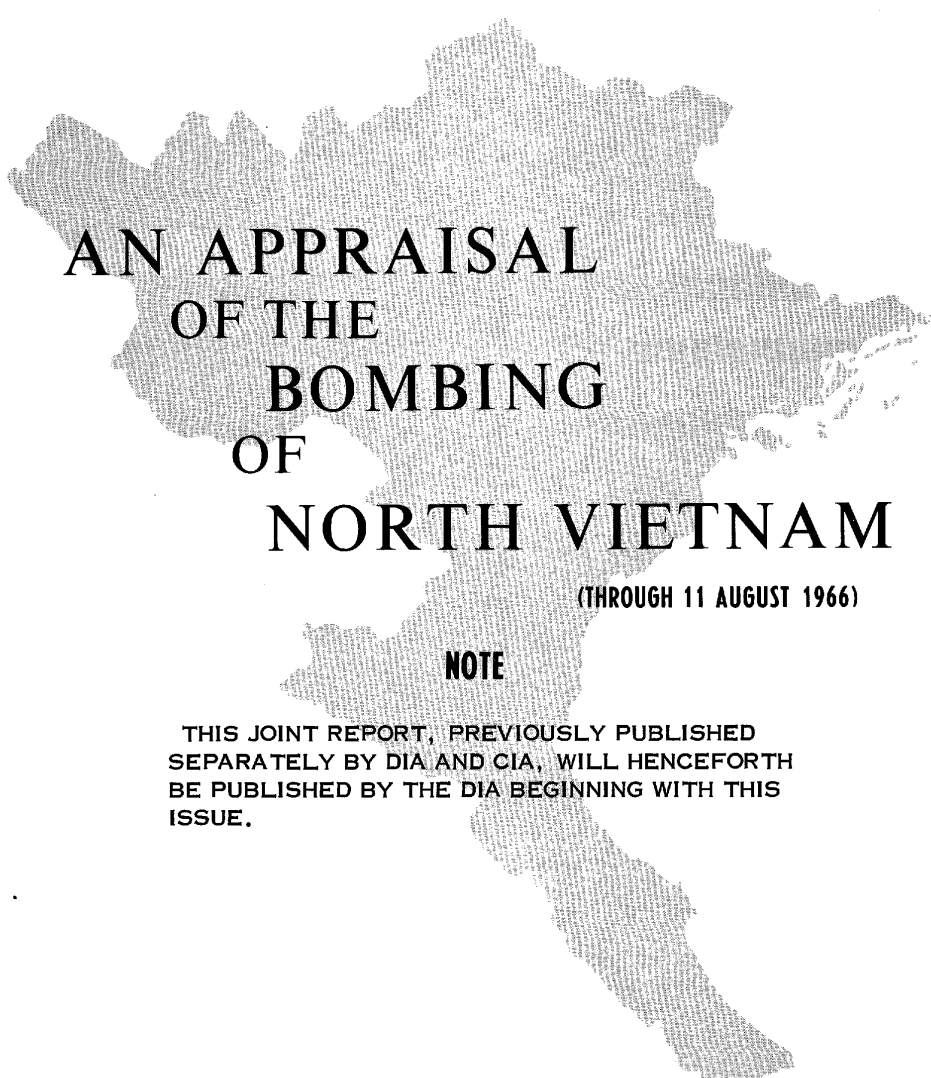
EXCLUDED FROM AUTOMATIC  
REGRADING, DOD DIR 5200.10  
DOES NOT APPLY

**SECRET**

**NO FOREIGN DISSEMINATION**

**WARNING**

This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Sections 793 and 794. The transmission or revelation of its contents in any manner to an unauthorized person is prohibited by law.



# AN APPRAISAL OF THE BOMBING OF NORTH VIETNAM

(THROUGH 11 AUGUST 1966)

## NOTE

THIS JOINT REPORT, PREVIOUSLY PUBLISHED  
SEPARATELY BY DIA AND CIA, WILL HENCEFORTH  
BE PUBLISHED BY THE DIA BEGINNING WITH THIS  
ISSUE.

~~SECRET-NO FOREIGN DISSEM~~

AN APPRAISAL OF THE BOMBING OF NORTH  
VIETNAM THROUGH 11 AUGUST 1966

SUMMARY

1. (S/NFD) Air strikes against North Vietnam in July and early August have increased over recent months with particular emphasis on POL facilities, dispersed POL storage sites, lines of communications (LOCs) and transportation equipment. After the initial spectacular air strikes against the major bulk POL facilities, which began in late June, the campaign against NVN POL has steadied down to a slow and grinding effort to reduce the remaining bulk capacity and that of dispersed storage. This effort is slowing down and making difficult and costly the import and distribution of POL for the North Vietnamese.

2. (S/NFD) All five major rail lines were struck during the period. The Hanoi-Lao Cai and Hanoi-Vinh lines are interdicted for through service, the Hanoi-Dong Dang and Hanoi-Thai Nguyen lines are probably operational for through service, and the status of the Hanoi-Haiphong line is uncertain. With the exception of small water craft, the destruction of transport equipment in July was at the highest level to date. However, there are no indications that shortages in transportation have been serious.

3. (S/NFD) The North Vietnamese are placing emphasis on the development of alternate highway routing within the NVN Panhandle network. Highways in this area have been subject to extensive interdiction which has required heavy maintenance and the development of

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

longer and lower capacity bypasses. Continued restoration and construction work on the LOCs throughout the country combined with the use of expedients have permitted the North Vietnamese to satisfy their logistic requirements and to continue their support of Communist activities in South Vietnam and Laos.

4. (S/NFD) Although there has been no noted change in VC/NVA military capabilities in South Vietnam which could be attributed to the air strikes in NVN, the recent B-52 strikes in the DMZ area disrupted support of the NVA 324B Division and have probably discouraged operations of this type in the immediate future.

5. (S/NFD) There is evidence that the regime is experiencing difficulty in implementing its urban evacuation program and that it has caused some popular dissatisfaction, but there is no concrete evidence that the air strikes have significantly weakened popular morale.

6. (S/NFD) Damage to the economy increased by almost \$10 million,\* the highest amount of economic loss measured during any reporting period in this series of reports. Total measurable direct and indirect losses to the economy and the military establishment are now estimated at \$106 million. The loss of storage capacity in bulk petroleum facilities has presented Hanoi and its Allies with the necessity of improvising a makeshift storage and distribution system and conversion to this system has placed an additional heavy drain on economic resources. The cumulative debilitating effects on the economy are

---

\* US dollars are used throughout this report.

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

becoming increasingly apparent with the disruption of agricultural and industrial production. It is certain now that economic growth has stagnated. Shortages of economic goods and hardships are apparent among some parts of the civilian population but there have been no sustained and critical hardships among the bulk of the people.

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

Effects on Military Targets

1. (S/NFD) Air strikes against North Vietnam in July and early August have increased over recent months with particular emphasis on POL facilities, dispersed POL storage sites, lines of communications (LOCs) and transportation equipment. Weather conditions improved in some sections of the country thereby enhancing the general effectiveness of the strikes in those areas. After the initial spectacular air strikes against the major bulk POL facilities, which began in late June, the campaign against NVN POL has steadied down to a slow and grinding effort to reduce the remaining bulk capacity and that of dispersed storage. This effort is slowing down and making difficult and costly the import and distribution of POL for the North Vietnamese. All five major rail lines were struck during the period. With the exception of small water craft the destruction of transport equipment in July was at the highest level to date. However, there are no indications that shortages in transportation have become serious.

2. (S/NFD) As of 11 August 1966, about 76 per cent of JCS targeted POL storage capacity (100,840 M.T.) has been destroyed by the air campaign. The JCS targeted capacity at the time of the first attack is now estimated to have consisted of some 131,660 M.T. located in 13 facilities. This represents a revision of previous estimates of JCS targeted capacity due to analysis of much better photography obtained for bomb damage assessments. Capacity remaining

~~SECRET-NO FOREIGN DISSEM~~

**SECRET-NO FOREIGN DISSEM**

at these sites is estimated to be some 30,820 M.T. (See Tab A). POL storage at Phuc Yen and Kep are located near jet airfields and have not been authorized for strikes. These facilities together with additional dispersed storage on or near the airfields have provided fuel for the continued high levels of NVN air activity during the reporting period.

3. (S/NFD) The program for the dispersal of POL supplies and storage in NVN is continuing and some of these installations have also been struck. Additional semi-permanent tank sites and drum storage sites are being identified regularly. Particularly significant is the discovery of POL storage in areas which the NVN apparently consider "secure." Storage has been seen in tanks implanted in dikes, in drums dispersed through villages, at churches and in cemeteries. Strikes against these sites would have propaganda value to the NVN. Continuation of this type of dispersal practice can be expected.

4. (S/NFD) An immediate effect of the POL strikes, particularly those at Haiphong, was to disrupt the flow of POL to North Vietnam by sea. Imports in April and May reached as much as 34,300 M.T. per month. Since the POL strikes began in June, no tankers have off-loaded at the Haiphong terminal, but POL in drums has been noted on dry cargo vessels. Imports of POL by railroad, coastal barges and craft, and to a very limited extent by air have probably occurred. No pattern of the use of alternative routes has yet been

**SECRET-NO FOREIGN DISSEM**



~~SECRET-NO FOREIGN DISSEM~~

detected. It is probable that several methods of delivery or a combination of methods will eventually evolve. About 1,000 M.T. of imports, primarily in dry cargo ships, have been noted in the last 45 days compared with an average of 22,000 M.T. per month during the first half of 1966. Presently one Soviet tanker is en route to Haiphong and is due there about 25 August. If this tanker proceeds to Haiphong, it should give an indication of whether direct tanker shipment of bulk POL to North Vietnam will be resumed.

5. (S) No evidence of any shortage of POL has been noted, and it must be assumed that stocks on hand have been adequate to sustain necessary operations. How long this condition will continue is not clear at this time. High priority activities such as military transport, SAM support, and aircraft operations will no doubt be sustained at the expense of other POL consuming functions.

6. (S/NFD) All five major rail lines were struck during July. Two lines are interdicted for through service, two are probably operational for through service, and the status of the remaining line is uncertain. Rail shuttle service, however, undoubtedly continues between interdictions on those lines which are closed to through traffic. Moreover, increased inland and coastal water traffic apparently has largely compensated for the decrease in rail traffic. We estimate that there has been little change in transport performance in terms of either ton-kilometers or tons carried in the first half of 1966. The Hanoi-Lao Cai line is interdicted for

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

through service between Viet Tri and Hanoi at the Viet Tri railroad/highway bridge. All bridges north of Viet Tri on this line have been repaired. The Hanoi-Vinh line is open for through traffic at least as far south as Qui Vinh. The Hanoi-Dong Dang rail line probably is open for through service. Aerial photography of 8 August indicates that one of the two bridges at Cao Nung has been repaired and the Dap Cau bridge on the Hanoi-Dong Dang line probably also has been repaired. Pilots reported the destruction of two railroad bridges on the Hanoi-Thai Nguyen line on 25 July, but photographic confirmation has not been received. In any event, enough time has elapsed to permit the resumption of through service on this line. The Hai Duong railroad/highway bridge on the Hanoi-Haiphong rail line was restructed on 10 August but assessment of the damage is not yet available. The Hanoi-Haiphong line was operational for through traffic prior to the 10 August strike.

7. (S) Although the amount of railroad rolling stock destroyed or damaged in July (310) was somewhat less than that during June, one locomotive was destroyed and three were damaged. In early August, three more locomotives were destroyed. This is the first period in several months that locomotives have been reported destroyed or damaged. The air strikes on railroad equipment have been steadily reducing the NVN inventory and there have been no indications of a major effort to import replacements. Some equipment has probably been made available through release of equipment

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

formerly used for hauling Chinese shipments to Kunming via Hanoi. Some equipment also could have been transferred from the Kunming railway system, but no significant influx of such equipment has been noted. Cumulative totals of damaged and destroyed targets are shown in Tab B.

8. (S) A fairly successful level of road interdiction was achieved during the period. Most of the effort was in the area south of the 20th Parallel. This area has been subject to extensive interdiction requiring heavy maintenance and development of longer and lower capacity bypasses. The North Vietnamese are placing emphasis on the development of alternate highway routing within the NVN Panhandle network. They have also continued restoration and construction work on the major LOCs throughout the country and have resorted to other measures where expedient. These include the employment of ferries, floating bridges, submerged causeways, and even temporary bridging across destroyed spans which is removed during daylight hours. These efforts have permitted the North Vietnamese to satisfy their logistic requirements and to continue their support of Communist activities in SVN and Laos.

9. (S/NFD) Although no JCS targeted waterway facilities or ports were struck, transshipment facilities at Phat Diem, Thai Binh, and Nam Dinh were attacked repeatedly and numerous buildings were reported destroyed or damaged.

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

10. (S/NFD) Aerial operations extended over 19 waterway routes and resulted in nearly 1,200 craft reported damaged or destroyed; significant increases in secondary explosions and POL-type fires were also noted. Reported activity against craft on the Red River, the Song Lo, and the Song Chay, northwest of Hanoi is also significant because these routes are capable of providing support to the southward movement of materiel from China and can act as alternates and supplements of other lines of communication. Increased transport activity was noted on waterway routes clearing the Haiphong area and in the Red River delta area.

11. (S/NFD) Heavy strikes continued to be concentrated against the intracoastal waterway between Vinh and Thanh Hoa, and have hindered through waterway movement on this important north-south route. Highlighting operations south of the 20th Parallel were strikes against craft on the Song Ngan Pho. Significant concentrations of craft have been detected on this route periodically, indicating probable support of road infiltration activity via Nape Pass into Laos.

12. (S/NFD) Air strikes against EW and GCI type radars have left the NVN air warning system generally intact. A 20 per cent increase in equipment in the past 30 days, has meant that these strikes have had virtually no long term effect on the NVN radar system. Air strikes against the Kep Radar Site on 1 July were effective in keeping the site inactive for 20 days. The effect of strikes against radars supporting AAA and SAM sites has been

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET=NO FOREIGN DISSEM~~

difficult to evaluate. Although equipment has been damaged or destroyed as a result of individual strikes, there is no evidence of loss in the total NVN radar inventory which would suggest a steady and rapid replacement of lost equipment has been attained.

13. (S/NFD) The armed forces of NVN continue to expand and the infiltration of men and materiel into SVN and Laos continues at a high rate. There has been no noted change in VC/NVA military capabilities in SVN, which could be attributed to the air strikes in NVN. The recent B-52 strikes in the DMZ area appear to have disrupted support of the 324B Division in northern SVN and called world attention to North Vietnam's extensive preparations in that area. These strikes coupled with the successful friendly ground operations in the area immediately south of the DMZ have probably discouraged operations of this type in the immediate future. The strikes on POL facilities have had no apparent effect on infiltration activity. The effects of these strikes would more likely be noted first in other areas, such as the civilian economy.

#### Leadership and Public Reactions

14. (S/NFD) The recent intensification of the US bombings on North Vietnam does not appear to have markedly affected the DRV leadership's resolve to press on with the war. Statements by North Vietnamese leaders in recent weeks have expressed this resolve in extremely strong and unyielding language. This was most clearly evident in President Ho Chi Minh's appeal of 17 July. In that

~~SECRET=NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

address, the DRV leader asserted that even if the US should bring a million troops to Vietnam, destroy Hanoi, Haiphong and the North Vietnamese industrial enterprises, and pit thousands of planes against the North, the Vietnamese Communists will still be victorious even though the war may last 20 years or longer.

15. (S/NFD) Ho Chi Minh also dramatized North Vietnam's determination to persist in its struggle with "US imperialism" by signing a decree calling for "partial mobilization" of the reserves. Later clarifications indicated that most of the effort would be applied to improving the readiness of the militia, paramilitary, and youth groups rather than to provide for a substantial growth of the armed forces. It would appear that this decree was promulgated primarily for propaganda purposes and to heighten the populace's involvement in the war effort.

16. (S) An article in the party daily Nhan Dan on 7 August, indicated that the regime is experiencing some difficulty in implementing its program of evacuating a large portion of the urban population. The editorial pointed out that it was necessary to further accelerate the evacuation in order to preserve human life and that "educational mobilization" must be undertaken to imbue a spirit of "unity and mutual assistance" among the peoples in the evacuated areas. In addition, Nhan Dan implied that stronger population control measures were necessary to make the evacuation be of "lasting character" and to keep the resettled individuals from

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

drifting back to the cities. While the evacuation program has caused some popular dissatisfaction, there continues to be no concrete evidence that the air strikes against the North have significantly weakened popular morale.

Effects on the Economy

17. (S/NFD) Damage to the economy increased by almost \$10 million, the highest amount of economic loss measured during any reporting period in this series of reports. Damage for the period was almost one-sixth of the total damage sustained by the economy of North Vietnam since the ROLLING THUNDER program began. Destruction and damage to transportation equipment accounted for the largest part of this increase, but significant losses were also accounted for by decreases in foreign exchange earnings, and the destruction and damage of petroleum storage facilities, bridges, and electric power plants.

18. (S/NFD) The loss of storage capacity in the principal bulk petroleum storage facilities has presented Hanoi and its Allies with the necessity of improvising a makeshift storage and distribution system for petroleum. The conversion to the new system is placing an additional heavy drain on economic resources and the operation of the system will increase the cost of acquiring and distributing new supplies of petroleum. However, the availability of substantial stocks in remaining bulk storage and dispersed facilities, has apparently enabled the North Vietnamese to maintain petroleum

~~SECRET-NO FOREIGN DISSEM~~

~~SECRET-NO FOREIGN DISSEM~~

distribution and economic activity. The attacks against railroad transportation have continued to interrupt through service on all of the major lines for varying periods of time and contributed substantially to the disruption of transport within the country. Damage to electric power plants has gradually eroded almost one-third of total power generating capacity.

19. (S/NFD) The cumulative debilitating effects on the economy are becoming increasingly apparent. Industrial production has already been affected adversely by the diversion of skilled labor and capital to the repair of bomb damage, interruptions and uncertainties in distribution patterns, and the further dispersal of production facilities. Local industry which accounts for almost half of all industrial output has received considerable emphasis in development programs since early 1965. But on 3 August, Hanoi noted that the output of local industry during the first half of 1966 remained at almost the same level as in the first half of 1965. Recent propaganda statements highlight the achievements of local industry but are silent about the modern and centralized industries, thus tacitly confirming previous estimates of continued deterioration in industrial performance. Moreover, the intensified dispersal of additional light industry and handicraft enterprises to rural areas will decrease the prospects for growth in local industry.

20. (S) The disruption of normal farming schedules caused by air attacks and the diversion of labor to the repair of bomb damage

~~SECRET-NO FOREIGN DISSEM~~



**SECRET--NO FOREIGN DISSEM**

have combined with a poor growing season to create a substantial shortfall in the spring agricultural crop. For the same reasons there have been planting delays which may make it difficult to achieve a successful 10th month harvest.

21. (S/NFD) The problems in both industrial and agricultural production may be exacerbated if the recent "partial" mobilization of reservists increases the shortage of managerial and administrative skills for the operation of the economy. Worker efficiency may also decline as a result of renewed emphasis upon the evacuation of non-essential personnel -- including dependents -- from the cities. It is certain now that economic growth has stagnated and that shortages of economic goods and hardships are apparent among some parts of the civilian population. The cost to Hanoi of the air strikes in both financial and material terms, however, is more than compensated by economic aid and technical assistance provided by other Communist countries. Moreover, the primarily agrarian nature of the subsistence economy of North Vietnam means that there will probably be no sustained and critical hardship among the bulk of the population as a consequence of the conduct of the air war to date.

22. (S/NFD) The Thai Nguyen and Viet Tri thermal electric power plants were damaged by air strikes in July. Damage to the Thai Nguyen plant, the third largest power plant in North Vietnam, resulted in the loss of some 10-20,000 kilowatt of capacity, with

**SECRET--NO FOREIGN DISSEM**

~~SECRET-NO FOREIGN DISSEM~~

the total electric capacity now out of service in North Vietnam estimated at 60-70,000 kilowatt -- almost one-third of the national capacity. Damage to the Viet Tri plant was slight, probably causing a suspension of service for several days at most. Partial restoration of service at the Thai Nguyen plant may have already been accomplished, but complete restoration of service will require at least one year and probably will not be possible without foreign assistance. The capacity probably remaining intact at the Thai Nguyen power plant -- about one-third the original generating capacity -- is not sufficient to meet the total demands of the local community, including the iron and steel complex, and, simultaneously, to transmit power to Hanoi. Transmission to Hanoi may be given priority because the shortage of electricity already being experienced there has required rationing. The power available to Hanoi, which could meet only about 80 per cent of requirements after the Uong Bi power plant was put out of operation in April 1966, would be reduced to about 60 per cent of normal demand by the loss of power from Thai Nguyen. Moreover, the power needs in Thai Nguyen are probably less critical.

23. (S/NFD) Analysis of bomb damage to the Viet Tri Paper Mill indicates that the mill will be unable to resume production for at least six months and perhaps more than a year. Reconstruction and repairs probably will not be possible without foreign assistance. North Vietnam will also have to turn to imports to offset the loss in output. The mill, built with Chinese aid, has a reported capacity

~~SECRET-NO FOREIGN DISSEM~~

of 30,500 tons per year of printing paper, stationery, and cement bagging paper and is by far the largest producer of paper products in North Vietnam.

24. (S) Direct losses caused by air strikes against economic and military facilities and equipment measured in terms of estimated reconstruction or replacement cost are now estimated at some \$91 million as shown in the tabulation below.

| <u>Economic Facilities and Equipment</u>    |                        | <u>Military Facilities and Equipment</u>      |                        |
|---|------------------------|---|------------------------|
| <u>Targets</u>                              | <u>Million Dollars</u> | <u>Targets</u>                                | <u>Million Dollars</u> |
| Railroad/Highway Bridges <u>1/</u>          |                        | Barracks                                      | 16.3                   |
| Reconstruction                              | 13.2                   | Ammunition Storage                            | 4.5                    |
| Temporary Repairs                           | 3.0 <u>2/</u>          | Supply Depots                                 | 3.2                    |
| Transportation Equipment                    | 18.9 <u>3/</u>         | Radar and Communications                      | 1.1                    |
| Railroad Yards and Ports                    | 1.0                    | Naval Bases                                   | 0.8                    |
| Electric Power Plants                       | 7.1                    | SAM Sites                                     | 1.8                    |
| Principal Bulk Petroleum Storage Facilities | 2.2 <u>4/</u>          | Aircraft                                      | 10.0                   |
| Manufacturing Facilities                    | 2.1                    | Airfields                                     | 0.4                    |
|   |                        | Naval Craft                                   | 4.3 <u>5/</u>          |
|   |                        | Miscellaneous Targets of Armed Reconnaissance | 0.8                    |
| Total                                       | <u>47.5</u>            |   | <u>43.2</u>            |

- 1/ The estimate in this category is incomplete because of inadequate post-strike photography.
- 2/ Includes \$2.1 million expended to date on temporary repairs and \$0.9 million required to provide temporary repairs for structure damaged but not yet restored to operable condition.
- 3/ Excludes destruction and damage to trucks in Laos.
- 4/ Excludes destruction and damage to support facilities and the contents of the tanks.
- 5/ The high value of destruction shown in the previous month's estimate was based on intelligence which was subsequently proven in error.

~~SECRET-NO FOREIGN DISSEM~~

Measurable indirect losses amount to about \$15 million made up of losses of foreign exchange earnings of \$11.5 million, and losses in the 1966 fall rice crop of \$3.5 million. In addition to these measurable indirect losses, there are many other losses and cost to the economy and the military establishment which cannot be assigned values. These would include the loss of production and lower productivity of labor resulting from the dispersal of industry, time lost from work as a consequence of civil defense measures, and loss of production caused by shortages of electric power.

25. (S) The air strikes on Haiphong were probably one of the important factors which have caused the virtual cessation of Free World shipping to NVN. Only one ship, chartered out of Hong Kong, has been to Haiphong since June compared with an average of nine Free World ships per month in the first six months of 1966. Communist shipping, however, has remained about the same. Dry cargo deliveries by sea, however, reached a record volume. The large volume of cargo arriving at Haiphong plus the frequent interruption of port operations during air raid alerts has produced some port congestion. Exports of apatite in July, the first such shipments since August 1965, were far below the normal levels before the bombing. Coal shipments from Cam Pha have continued to decline since the air strikes against coal processing and loading facilities in mid-April.

~~SECRET-NO FOREIGN DISSEM~~

NORTH VIETNAM: GROSS CAPACITY AT PRINCIPAL  
 PETROLEUM STORAGE FACILITIES

(In metric tons of average petroleum)

|                      | <u>Capacity<br/>At Time of First Attack</u> | <u>Capacity<br/>11 August 1966</u> |
|----------------------|---|------------------------------------|
| Haiphong             | 40,620                                      | 4,330                              |
| Nguyen Khe           | 7,500                                       | 6,680 <u>a/</u>                    |
| Bac Giang <u>b/</u>  | 1,960                                       | 1,260                              |
| Do Son               | 2,860                                       | 2,860                              |
| Viet Tri <u>c/</u>   | 1,400                                       | 1,320                              |
| Duong Nham           | 4,130                                       | 2,070                              |
| Vinh <u>d/</u>       | 12,030                                      | 1,180                              |
| Phu Qui <u>d/ e/</u> | 7,560                                       | 0                                  |
| Hanoi                | 30,620                                      | 0                                  |
| Phu Van <u>d/</u>    | 840   | 0                                  |
| Nam Dinh <u>d/</u>   | 11,020                                      | 0                                  |
| Phuc Yen <u>f/</u>   | 9,910                                       | 9,910                              |
| (Sub-Total)          | (130,450)                                   | (29,610)                           |
| Kep <u>f/ g/</u>     | 1,210                                       | 1,210                              |
| Total                | 131,660                                     | 30,820                             |

Destroyed:

Cumulative from first attack - 100,840  
 From 28 June - 70,570

- a/ Does not reflect damage inflicted on 19 July, undetermined as of 10 August.  
b/ Four tanks with capacity of 3,460 tons were removed prior to 28 June and new location had not been identified as of 10 August.  
c/ One tank with capacity of about 1,350 tons was removed prior to 28 June and new location had not been identified as of 10 August.  
d/ This site was attacked during the period 1964-65.  
e/ Construction of this facility consisting of nine tanks was not completed nor was the facility ever operational before the site was destroyed in mid-1965.  
f/ This site was not attacked as of 10 August.  
g/ Kep is considered to be a dispersed site rather than a principal storage facility but carries a JCS target number.

TAB A

~~SECRET-NO FOREIGN DISSEM~~

## RESULTS OF STRIKES ON NVN TARGETS a/ THRU 11 AUGUST 1966

TABLE 350

| Fixed Targets   | Total Targets |                |       | Targets Struck |      | No. Attacks | Strike Sorties | % Of National Capacity |             |
|-----------------|---------------|----------------|-------|----------------|------|-------------|----------------|------------------------|-------------|
|                 | c/<br>No.     | d/<br>Targeted |       | No(*)          | %    |             |                | Destroyed              | Inactive g/ |
|                 |               | No(*)          | %     |                |      |             |                |                        |             |
| Barracks        | 443 man       | 62             | 99.63 | 45             | 23   | 204         | 2287           | 21.79                  | 5.56        |
| Ammo Depots     | 112.6 MT      | 18             | 96.7  | 13             | 75.7 | 52          | 1155           | 73.4                   | 37.51       |
| POL Storage *   | 131.6 MT      | 13             | NA    | 11             | 88.4 | 30          | 387            | 76.6                   |             |
| Supply Depots   | 10550 sq ft   | 26             | 38.6  | 17             | 19.0 | 50          | 599            | 12.22                  | 2.0         |
| Power Plants    | 187 KW        | 19             | 97.6  | 6              | 27.5 | 25          | 238            | 33.0                   |             |
| Maritime Ports  | 7.8 ST/Dy     | 10             | 95    | 5              | 28   | 17          | 219            | 13.0                   | 2.63        |
| RR Yards        | 33.7 ST/Dy    | 4              | 78    | 2              | 19   | 17          | 135            | 9.3                    |             |
| Explosive Plant | 1 MT          | 1              | 100   | 1              | 100  | 3           | 28             | 71.0                   |             |
| Airfields       | 23            |                |       | 4              |      | 12          | 359            |                        |             |
| Naval Bases     | 15            |                |       | 3              |      | 16          | 213            |                        |             |
| Bridges         | 883           |                |       | 46             |      | 179 e/      | 2371           |                        |             |
| Commo Install   | 45            |                |       | 2              |      | 2           | 15             |                        |             |
| Radar Sites     | 50            |                |       | 15             |      | 63 e/       | 406            |                        |             |
| SAM Sites       | 125           |                |       | 47             |      | 54          | 315            |                        |             |
| Locks & Dams    | 91            |                |       | 2              |      | 2           | 10             |                        |             |
| Ferries         | 34            |                |       | 11             |      | 7 e/        | 44             |                        |             |

NOTE: Change reflects update of 448 sorties from error in 350 on 24 Feb 66.

Total Sorties: 8,983  
Armed Recce Sorties  
51,281

Results f/  
Destroyed Damaged  
Vessels 2,255 3,668  
Vehicles 1,517 1,384  
RR Stock 946 1,247

\* POL Storage Excludes Dispersed Storage.

- a/ Assessments are based on best information received, will be refined as more accurate information becomes available.
- b/ Strike plus flak suppression sorties. Some applied to multiple targets; in this summary assigned to principal target.
- c/ National capacity in 1,000's where measurement shown.
- d/ Percentages of national capacity where appropriate.
- e/ Also numerous attacks during armed recce and other missions.
- f/ Also numerous installations, AA sites, bridges, etc, attacked and road and rail cuts made.
- g/ Per cent inactive due to dismantling or abandonment of facilities as a result of air strikes.
- (\*) These columns are not additive, since the number of installations, both targeted and struck in some cases, apply to more than one category of targets. (i.e., barracks, supply and ammo depots).

NOTE: For comparative purposes.

US worldwide ammo storage capacity is 6,936,000 metric tons (CONUS 5,719,000 MT).  
US worldwide military POL storage capacity is 15,452,000 MT; national US commercial capacity is 151,325,000 MT; approximate average \$ value of 1 MT of POL products is \$28.  
US worldwide military supply depot covered storage space is 137,100,000 sq. ft. (CONUS 121,300,000 sq. ft.).  
Total kilowatt capacity of power plants serving metropolitan areas: New York - 7.6 million; Chicago - 6 million; Washington (DC and Md/suburbs only) - 2.4 million.

TAB B

~~SECRET-NO FOREIGN DISSEM~~

**SECRET-NO FOREIGN DISSEM**DISTRIBUTION LIST FOR DIA/CIA INTELLIGENCE REPORT  
AN APPRAISAL OF THE BOMBING OF NORTH VIETNAM

|                            |        |
|----------------------------|--------|
| WHITE HOUSE                | 7 Cys  |
| DEFENSE                    |        |
| SECDEF                     | 2 Cys  |
| ASST SECDEF (ISA)          | 2 Cys  |
| BUREAU OF THE BUDGET       | 1 Cy   |
| TREASURY                   | 1 Cy   |
| USIA                       | 1 Cy   |
| AID                        | 1 Cy   |
| NASA                       | 1 Cy   |
| NSA                        | 5 Cys  |
| STATE                      | 12 Cys |
| AEC                        | 1 Cy   |
| FBI                        | 1 Cy   |
| NIC                        | 1 Cy   |
| ACDA                       | 1 Cy   |
| CHAIRMAN, JCS              | 1 Cy   |
| DIRECTOR, JOINT STAFF      | 1 Cy   |
| J-1                        | 1 Cy   |
| J-3                        | 2 Cys  |
| J-4                        | 1 Cy   |
| J-5                        | 1 Cy   |
| J-6                        | 1 Cy   |
| SACSA                      | 1 Cy   |
| NMCC                       | 3 Cys  |
| ARMY:                      |        |
| CHIEF OF STAFF             | 2 Cys  |
| DCSOPS                     | 1 Cy   |
| ACSFOR                     | 1 Cy   |
| ACSI                       | 1 Cy   |
| ACSI-CI                    | 1 Cy   |
| ACSI-Eastern               | 1 Cy   |
| STAG                       | 1 Cy   |
| NAVY:                      |        |
| CHIEF OF NAVAL OPERATIONS  | 2 Cys  |
| DNI                        | 1 Cy   |
| OP-921E                    | 1 Cy   |
| OP-922Y1                   | 1 Cy   |
| OP-922Y2                   | 1 Cy   |
| OP-92B1                    | 1 Cy   |
| AIR FORCE:                 |        |
| CHIEF OF STAFF             | 2 Cys  |
| ACS,I/USAF                 | 1 Cy   |
| AFNINDI                    | 3 Cys  |
| AFNIEBB                    | 1 Cy   |
| AFISI (Spec Investigation) | 1 Cy   |
| AUL (Air Univ Library)     | 1 Cy   |

**SECRET-NO FOREIGN DISSEM**

**SECRET—NO FOREIGN DISSEM**

|               |         |
|---------------|---------|
| MARINE CORPS: |         |
| COMMANDANT    | 1 Cy    |
| G-2           | 1 Cy    |
| CINCPAC       | 2 Cys   |
| CINCPACAF     | 1 Cy    |
| CINCUSARPAC   | 1 Cy    |
| CINCPACFLT    | 1 Cy    |
| COMUSMACV     | 2 Cys   |
| 7AF           | 1 Cy    |
| CINCLANT      | 1 Cy    |
| CINCSTRIKE    | 1 Cy    |
| CINCSAC       | 1 Cy    |
| SAC 544       | 1 Cy    |
| CINCTAC       | 1 Cy    |
| AFSTRIKE      | 1 Cy    |
| CONTIC        | 1 Cy    |
| CINCALCOM     | 1 Cy    |
| CINCEUR       | 1 Cy    |
| CINCUSAREUR   | 1 Cy    |
| CINCUSAFE     | 1 Cy    |
| CINCNAVEUR    | 1 Cy    |
| CINCCONAD     | 1 Cy    |
| CIA           | 125 Cys |
| DIA:          |         |
| DIADR         | 1 Cy    |
| DIADD         | 1 Cy    |
| DIAAP         | 1 Cy    |
| SC-1          | 1 Cy    |
| XX            | 1 Cy    |
| AP-2          | 1 Cy    |
| AP-2A3        | 2 Cys   |
| AP-2F         | 4 Cys   |
| AP-1          | 1 Cy    |
| AP-1C3        | 1 Cy    |
| AP-1H2        | 1 Cy    |
| CO-2C         | 1 Cy    |
| JT            | 1 Cy    |
| CI            | 1 Cy    |
| AP-1R2        | 1 Cy    |
| AP-1R3        | 1 Cy    |
| AP-1T         | 2 Cys   |
| JS            | 1 Cy    |

**SECRET—NO FOREIGN DISSEM**



Approved for Release 2001/09/06 : CIA-RDP82-008205R000100050012-6

~~SECRET NO FOREIGN DISSEM~~

Approved for Release 2001/09/06 : CIA-RDP82-008205R000100050012-6

~~SECRET NO FOREIGN DISSEM~~